Claim 49. Use as claimed in claim 48, wherein the analyte-specific modified solid phase reactant is selected from the group comprising analyte-specific antibodies, antigens, nucleic acids, nucleic acid analogues and lectins.

Claim 50. Use as claimed in claim 11, wherein P is biotin or a biotin derivative.

REMARKS

Claims 1-12, 14-26 and 28-42 are currently pending. Claims 1-7, 14-26, 28-38, 41 and 42 are withdrawn from consideration. Claims 8-12, 39 and 40 are rejected. Claims 8-10, 12, 39 and 40 are canceled. Claim 11 has been amended and new claims 42-50 have been added to more clearly set forth the use of a conjugate for reducing the unspecific binding to a solid phase in a method for the detection of an analyte. Support for amended claim 11 and new claims 43-51 can be found throughout the application as filed, for example at original claim 11 and page 2, line (third full paragraph) to page 5, line 2 of the specification as filed. No new matter has been added. Applicants respectfully request reconsideration and withdrawal of all rejections.

Claim Rejections - 35 U.S.C. § 112, first paragraph

Claims 8-12, 39 and 40 are rejected as not enabled. Applicants note that these rejections are addressed in particular to independent claim 8 which has been canceled. However, Applicants discuss these rejections in the context of amended claim 11.

The Office Action states that the specification does not define the term "I" as an "inert carrier". Claim 11 as amended indicates that "I" is in "inert biomolecule" as disclosed at page 5 of the specification.

The Office Action states that the conjugates are inconsistent with the conjugates described and enabled by the specification. The Office Action states that although the structures of the conjugates contain no additional linkage between the "P" and "(AO)" moieties, the conjugates of Examples 1 and 2 of the specification contain an additional linking moiety. Applicants respectfully disagree. Applicants point out that the phrase "partner of a high affinity binding pair" is broad enough to include both biotin and substituted biotin as shown in Examples 1 and 2. Applicants also point out that the modification of certain molecules with a (C_2-C_3) alkylene oxide group, for example polyethylene glycol, is clearly well known to those skilled in the art. In addition, Applicants urge that it is improper to attempt to limit a claim to a certain embodiment recited in the specification. The presence of an unspecified linkage within a certain embodiment would not result in any claim not being enabled.

The Office Action also states that the specification is not enabling for the conjugates where the terminal moieties are (AO)OH, (AO)OCH_3, or (AO)C(O)CH_3. Applicants respectfully disagree. Applicants urge that Examples and 1 and 2 are exemplary of the conjugates of the present invention. The specification at page 6 describes AO as a (C_2-C_3) alkylene oxide group, for example an ethylene oxide or propylene oxide group. The specification at page 6 also discloses that the end group T includes the terminal O atom of the polyoxyalkylene units. Therefore, Examples 1 and 2 are exemplary of the conjugates of the present invention, the Examples disclosing AO

linked to OH and OCH_3, respectively. The use of the end group C_1-C_4 acyl would be well within the skill of those in the art. In addition, Applicants again urge that it is improper to attempt to limit the claims to any certain embodiment disclosed by the specification.

The Office Action furthermore states that the specification is enabling only for the preparation of the conjugates of Examples 1 and 2. Applicants respectfully disagree. Applicants again urge that the Examiner is again improperly attempting to limit the claims to the embodiments of Examples 1 and 2. Applicants urge that the modification of various molecules with (C_2-C_3) alkylene oxide groups, for example polyethylene glycol, is certainly well known in the art. Therefore, the modification of a partner of a high affinity binding pair or biomolecule would also be well within the skill of those in the art. The modification of (C_2-C_3) alkylene oxide groups with the various recited end groups would also be within the skill of those in the art. Applicants urge that the various embodiments of the present invention are adequately enabled.

Claim Rejections - 35 U.S.C. § 112, second paragraph

Claims 8-12, 39 and 40 are rejected as indefinite and/or incomplete. The Office Action states that the claim 8 phrase "preferably selected from" and "inert carrier" are unclear. Applicants discuss this rejection within the context of amended claim 11 as claim 8 has been canceled. Applicants urge that claim 11 as amended does not include the term "preferably" and recites an inert "biomolecule".

Claims 11 and 12 are rejected as incomplete and indefinite in not reciting adequate method steps to define the recited methods of use. Claim 12 has been

canceled and claim 11 amended. Claim 11 has been amended so as to more clearly set forth the use of a conjugate for reducing the unspecific binding to a solid phase in a method for the detection of analyte. In particular, claim 11 has been amended to recite the use of a conjugate for reducing the unspecific binding to a solid phase in a method for the detection of an analyte which comprises certain steps as set forth at 2, line (third full paragraph) to page 5, line 2 of the specification.

The Office Action also states that the claims are rejected as indefinite in not defining the moiety through which "Pr" is linked to "I" or "(AO)" and through which "I" is linked to "(AO)". Applicants respectfully disagree. Applicants again submit that it is improper to attempt limit the claims to a specific embodiment of the present invention. It is clear that "Pr" is linked directly to "I" or "(AO), and accordingly, the claims are not indefinite.

Claim Rejections - 35 U.S.C. §§ 102 and 103

Claims 8-12, 39 and 40 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103 as obvious over Zalipsky (Bioconjugate Chem.,Vol. 6, pp. 150-165, 1995).

Claims 8 and 9 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Eaton et al. (U.S. Patent No. 6,047,698), Sluka et al. (U.S. Patent No. 5,932,296), Reichert et al. (U.S. Patent No. 5,832,165) or Herron et al. (U.S. Patent No. 5,677,196).

Claims 10, 11 and 40 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hammen (U.S. Patent No. 5,240,602) or Herron et al. (U.S. Patent No. 5,512,492) ("Herron 492").

Claim 10 under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ofsthun et al. (U.S. Patent No. 5,871,649).

Claim 8 is also rejected under 35 U.S.C. 102(b)/(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kricka (U.S. Patent No. 5,306,621), Theodore et al. (U.S. Patent No. 6,015,897) or Van Alstine (U.S. Patent No. 5,108,568).

Applicants respectfully note that claims 8-10, 12, 39 and 40 have been canceled and claim 11 amended. In accordance with claim 11 as originally filed, claim 11 has been amended to recite the use of a conjugate for reducing the unspecific binding to a solid phase in a method for the detection of an analyte comprising the steps of (a) preparing a solid phase on which a solid phase reactant and said conjugate are immobilized; (b) incubating the sample with the solid phase and a test reagent; and(c) detecting the presence or/and the amount of analyte in the sample. None of the cited references disclose the method of amended claim 11. None of the cited references teach or suggest reducing unspecific binding to a solid phase in the detection of an analyte. In particular, none of the cited references teach or suggest the steps of the method of claim 11 for the reduction of unspecific binding of interference substances to the solid phase.

Applicants respectfully urge that in light of the discussion above the claimed invention is in condition for allowance and request early notification to that effect.

In the event this paper is not timely filed, applicants hereby petition for an appropriate extension of time. The fee for this extension may be charged to our Deposit Account No. 01-2300, along with any other additional fees which may be required with respect to this paper.

Please charge any fee deficiency or credit any overpayment to Deposit Account No. 01-2300.

Respectfully submitted,

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